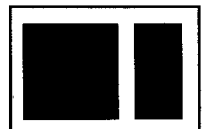


# **Amana® Radarange®**

MICROWAVE OVEN

## **Use & Care Manual**



**Models:  
RW321T  
and  
RWG321T  
700 Watts**

**When you know exactly what you want.**

# **Amana®**

**Please Read Before Operating Oven**

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Record in the space below the Model No., Manufacturing (Mfg) No. and Serial No. found on the nameplate of your oven. The nameplate is located at the back of the oven interior in the upper left hand corner.

**Model No.** \_\_\_\_\_

**Mfg. No** \_\_\_\_\_

**Serial No.** \_\_\_\_\_

**Date Installed** \_\_\_\_\_

**Selling Dealer** \_\_\_\_\_

Retain these numbers and your Sales Receipt for proof of purchase should warranty questions arise. Your Sales Receipt is required if warranty service is needed. Complete the registration card, which is included with the packet that comes with the oven. This must be filled out and returned to Amana Refrigeration, Inc. Federal regulations require that all manufacturers of microwave ovens have a permanent record of the owners of each oven.

# IMPORTANT SAFETY INSTRUCTIONS

Recognize this symbol as a SAFETY message

## WARNING

WHEN USING ELECTRICAL APPLIANCES, THESE BASIC SAFETY PRECAUTIONS SHOULD BE FOLLOWED, TO REDUCE THE RISK OF BURNS, ELECTRICAL SHOCK, EXPOSURE TO EXCESSIVE MICROWAVE ENERGY, FIRE, DEATH, INJURY TO PERSONS OR PROPERTY DAMAGE.

1. READ all instructions before using this appliance.
2. READ AND FOLLOW specific "PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY" found on page 4.
3. USE this appliance ONLY for its intended use as described in this manual.
4. Closely SUPERVISE any use by CHILDREN.
5. This appliance MUST BE GROUNDED! Connect only to a properly grounded outlet. See "GROUNDING INSTRUCTIONS" found on page 4.
6. Keep this appliance and cord AWAY from HEATED surfaces.
7. Read and follow "door surface cleaning" instructions, found on page 8.
8. Install or locate this appliance in accordance with the provided installation instructions found on page 4.
9. DO NOT immerse cord or plug in water.
10. DO NOT let cord hang over edge of table or counter.
11. DO NOT cover or block any openings on this appliance.
12. DO NOT use outdoors.
13. DO NOT heat whole eggs or sealed containers—for example closed jars—they may explode.
14. DO NOT use this appliance for canning, deep fat frying, or heating baby bottles.
15. DO NOT operate this appliance if it has a damaged cord or plug, if it is not working properly, or it has been damaged or dropped.

## TO REDUCE THE RISK OF FIRE IN THE OVEN CAVITY:

- a. DO NOT OVERCOOK FOOD. Carefully attend the appliance if paper, plastic, or other combustible materials are placed inside the oven to facilitate cooking.
- b. REMOVE WIRE TWIST-TIES from paper or plastic bags BEFORE placing the bag in the oven.
- c. If materials inside the oven smoke or ignite, keep the oven door closed, turn the oven off, and disconnect the power cord or shut off power at the fuse or circuit breaker. IF THE DOOR IS OPENED THE FIRE MAY SPREAD!

THIS APPLIANCE *MUST* BE SERVICED ONLY BY QUALIFIED SERVICE PERSONNEL. CONTACT YOUR NEAREST AUTHORIZED SERVICE FACILITY FOR EXAMINATION, REPAIR OR ADJUSTMENT.

## SAVE THESE INSTRUCTIONS

# SAFETY INSTRUCTIONS CONT.

## Read and Follow These Rules for Safe Operation.

This microwave oven is designed to be safe and reliable. As with all appliances, there are certain rules to follow. Make sure everyone who cooks with this oven is familiar with this product's operation and with these precautions.

## PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY

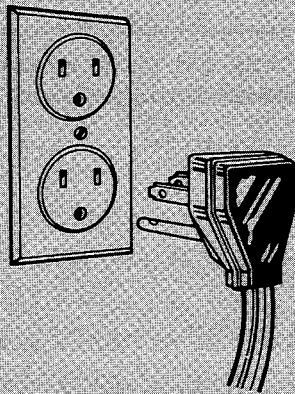
- (a) **DO NOT** attempt to operate this oven with the door open since open-door operation can result in harmful exposure to microwave energy. It is important not to defeat or tamper with the safety interlocks.
- (b) **DO NOT** place any object between the oven front face and the door or allow soil or cleaner residue to accumulate on sealing surfaces.
- (c) **DO NOT** operate the oven if it is damaged. It is particularly important that the oven door close properly and that there is no damage to the:
  - (a) Door (bent), (b) hinges and latches (broken or loosened), (c) door seals and sealing surfaces.
- (d) The oven should **NOT** be adjusted or repaired by anyone except properly qualified service personnel.

## UNPACKING THE OVEN

Inspect the oven for any damage such as dents in the outercase, or dents inside the oven cavity. Any dents or breakage should be reported to your

Amana dealer immediately. You will be told if the unit will operate correctly.

## GROUNDING INSTRUCTIONS



INSURE PROPER GROUND  
EXISTS BEFORE USING.

This appliance **MUST** be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This appliance is equipped with a cord having a grounding wire with a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded. **DO NOT** use a two-prong adaptor.

**⚠ WARNING** - Improper use of the grounding plug can result in a risk of electric shock or death.

Consult a qualified electrician or serviceman if the grounding instructions are not completely understood, or if doubt exists as to whether the appliance is properly grounded. If it is necessary to use an extension cord, use only a 3-wire extension cord that has a 3-blade grounding plug, and a 3-slot receptacle that will accept the plug on the appliance. The extension cord must be rated at a minimum of 15 amps, 120 volts, and should be no more than six feet in length. This oven should be plugged into a separate 120 volt, 15 amp, 60 hertz circuit. When a microwave oven is on a circuit with other appliances, an increase in cooking times may be required and fuses can be blown.

## OVEN PLACEMENT

**DO NOT** build the oven in with the sides, top or bottom airflow restricted. The oven must have sufficient airflow around it. If you wish to build in this microwave oven, use **ONLY** Amana model "RS"

trim kits that have a label identifying which Amana microwave oven model series may be used. Trim kits can be purchased from your dealer.

# SAFETY INSTRUCTIONS CONT.

## CAUTIONS

- (a) **Do not operate the oven when door seal is damaged**, to do so could allow microwave energy to escape.
- (b) **Extreme overcooking** can cause the food to smoke or possibly ignite.
  - DO NOT OPEN THE DOOR
  - TURN THE OVEN OFF BY PRESSING STOP PAD
  - DISCONNECT THE POWER CORD
  - SHUT OFF THE POWER AT FUSE OR CIRCUIT BREAKER PANELIf this happens; keep door closed, disconnect the power cord, or shut off power at the fuse or circuit breaker.
- (c) **▲ WARNING To prevent spontaneous boiling (eruption)**, liquids must be briskly stirred or poured (to mix in air) before being heated in a microwave oven. **DO NOT OVERHEAT**. If air is not mixed into a liquid, the liquid can erupt in the oven or after removal from the oven.
- (d) **Eggs** must **NOT** be cooked or reheated in the shell, or with an unbroken yolk, since this may result in a pressure build-up and eruption. Pierce the yolk with a fork or knife before cooking. Do **NOT** reheat previously cooked eggs in the microwave oven unless finely chopped or scrambled.
- (e) **Home canning** must **NOT** be done in a microwave oven. Home canning is generally done with metal lids. Since metal lids reflect microwaves, you cannot be assured that the food product will be heated uniformly to 212°F or above, and there is a probability of deterioration of the food product. USDA extension specialists do not recommend home canning in microwave ovens.
- (f) **Deep fat frying** must **NOT** be done in any microwave oven. The fat could overheat and be hazardous to handle.
- (g) **▲ WARNING: Do not heat sealed containers in any microwave oven.** Containers with restricted openings such as syrup bottles must **NOT** be used for cooking. Food or liquid could expand quickly and cause the container to break.
- (h) **Regular cooking thermometers** must **NOT** be used in a microwave oven. Most cooking thermometers contain mercury and may cause "arcing", malfunction, and/or damage to the oven.
- (i) **Plastic bags (and other air-tight containers)** must always be pierced or opened before heating in a microwave oven. This is needed to allow steam to escape during cooking.
- (j) **Metal or ceramic accessories** which have been specially designed to absorb microwave energy to provide heat ("active" accessories such as browning skillets) may be used with caution. To prevent possible damage to the tray, do **NOT** use an "active" accessory in which the "active area" is less than one inch above the tray. Test any such device before use and carefully read and follow manufacturer's instructions provided with the accessory. Any questions concerning these accessory products should be referred to the accessory manufacturer. Amana Refrigeration, Inc., does **NOT** endorse any brand of accessory. Remember that all microwave accessories are not "top quality"; some may **NOT** be suitable for microwave cooking. Caution must be used when purchasing microwave accessories.
- (k) **Newspapers** must **NEVER** be used in a microwave oven since they may ignite.
- (l) **Paper towels** which contain nylon or other synthetic fibers woven through them must **NOT** be used because the heated synthetics could melt and cause the paper to ignite.
- (m) **Use only popcorn in packages designed and labeled for microwave use.** You may place the package on an inverted microwave-safe glass loaf dish, as needed, to increase popped volume. Pop according to package directions, beginning with the **MINIMUM** amount of time recommended. Pop until bag has expanded and there are one to two seconds between pops. Popcorn yields may vary. Do **NOT** continue to heat after popping has stopped, since popcorn will scorch or burn. Do **NOT** leave oven unattended. Use caution when handling the hot glass loaf dish or hot popcorn bag.
- (n) **If you're using a microwave popcorn popper**, use according to manufacturer's instructions. Do **NOT** continue to heat after popping has stopped, since popcorn will scorch or burn. Do **NOT** leave oven unattended.
- (o) **Pot Holders** may be needed when cooking by microwave. Containers can become hot when heat is transferred from cooked food.

# CHECKING OVEN OPERATION

- A. Set the optional entry signal.** This optional signal can be set to "beep" whenever a pad is pressed. It confirms the oven has "read" and accepted your entry.  
**To program the entry signal:**  
 1. Plug in the oven. Dash lines will appear in the display.  
 2. Press **0**. The oven will "beep" now and whenever you press any pad.  
**To cancel the entry signal:**  
 Unplug the oven and reconnect it, but do not press **0**. Dash lines will appear in the display. The oven will not beep when you press the pads.
- B. To deactivate the end-of-cycle signal.**  
 This optional signal can be set to "beep" to indicate when cooking time has elapsed and when food has reached a set temperature. The signal is automatically set when you plug in the oven.  
**To cancel the end-of-cycle signal:**  
 Press **TIMER** before setting the clock (while the dash lines are still displayed).  
**Note:** Throughout this manual, you will note references to a tone that signals the end of a cooking or timing operation. If you have cancelled the end-of-cycle signal, disregard these references.
- C. Oven Light**  
 The oven light will come on when the door is opened. It will also come on when the oven is operating.
- D. Set the Clock.**  
 1. Press **RESET**.  
 2. Enter the time of day by pressing the numbers in sequence. For example, if it is 10:35 (a.m. or p.m.), press number pads **1, 0, 3** and **5**, in that order.  
 3. Press **CLOCK** twice. The clock is now set. If oven power is interrupted (for example, if the supply circuit is disconnected, or if there is a power failure), all programming

- instructions will be erased, and dashes will appear in the display. You must then reset the desired signal options and clock as indicated above.
- E. Check operation of the interlock systems.** The **START** and **STOP** pads turn the oven on and off. Microwave energy is generated only when the door is closed, cooking time or temperature has been set, and **START** has been pressed. In addition, the oven has interlock switches to assure no microwave energy is generated when the door is open. To check or remove food before the cooking time has elapsed, you may either press **STOP** or open the oven door to turn the oven off. Before the oven door opens, hidden interlock switches sense the motion of the door handle and automatically turn the oven off.
- Here is how you may check the operation of **START, STOP** and the interlock switches:
1. Place a glass of water in oven and close oven door.
  2. Press **RESET**.
  3. Press **5**, then **0**.
  4. Press **START**. The oven should operate and the oven light should come on.
  5. Press **STOP**. The oven should shut off immediately and the sound of the motor should cease. The oven light should go out.
  6. Open oven door fully. The oven light should come on when the door is opened.
  7. Press **RESET**.
- If under any of the preceding conditions the oven does not operate as stated, do not use it. Call your Amana dealer or authorized service agency.

## THE CONTROL PANEL

### Model RW321T and RWG321T

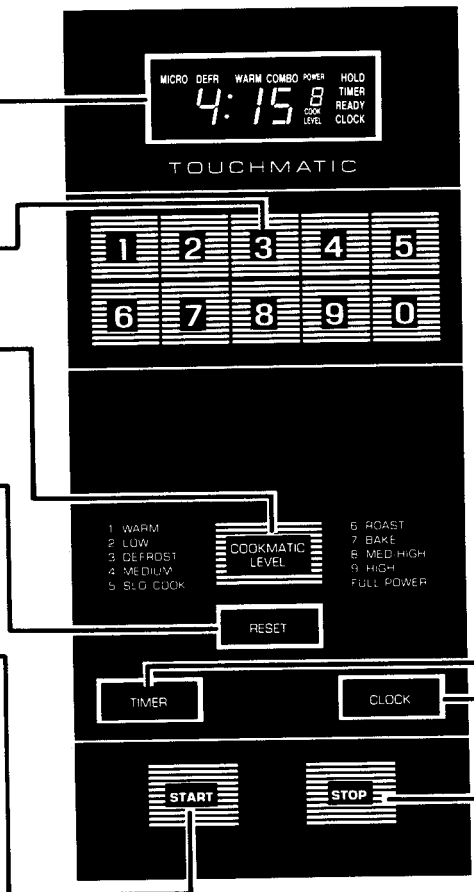
**READOUT DISPLAY** — Normally shows time of day.  
 • Shows remaining time when cooking by time or using the **TIMER**.

**NUMBERS** — Always press numbers first when programming the oven. Press in the same order as you would write them.

**COOKMATIC LEVEL** — Programs cooking power level. Press after pressing number pad corresponding to cook levels imprinted on control panel. (See page 7.)

**RESET** — Always press before programming oven. Can also be pressed during programming to cancel mistakes. When using **TIMER** while cooking, press to see cooking time.

**START** — Starts oven operation.



**TIMER** — Lets you time a separate task, even when the oven is cooking. Press after pressing after pressing numbers for time to be measured. (See page 7.)

**CLOCK** — Sets time of day. Press twice after pressing numbers for the current time. (See page 6.)

**STOP** — Stops oven. The oven can also be stopped by opening the door.

#### IF YOU MAKE A MISTAKE

- If the oven is operating, press **STOP**, then press **RESET**. This cancels everything. You must program the oven again.
- If the oven is not operating yet, press **RESET**. This cancels everything. You must program the oven again.

## TRY IT! COOKING WITH FULL POWER

This is the fastest and easiest way to cook.

1. **Place food in oven and close oven door.** When using the oven, always have food or water inside to absorb microwave energy.
2. **Press RESET.**
3. **Press numbers for cooking time** (to cook 1 minute 10 second, press **1, 1, 0**). The display will show the time you have set. If you make a mistake, press **RESET** and enter the desired time.

4. **Press START** and the oven will begin operating "MICRO" and "POWER" will be displayed. "MICRO" indicates the oven is programmed to cook. "POWER" is displayed whenever microwave energy is produced. Here, "POWER" is displayed continuously, indicating the oven is operating at Full Power.
5. **The oven will stop and sound a signal at the end of cooking time.**

## TRY IT! USING THE TIMER

You can use the oven like a separate timer to time mixing, steeping or even telephone calls.

**If the oven is not cooking:**

1. **Press RESET.**
2. **Press the numbers for the time desired.**
3. **Press TIMER.** (NOTE: Do not press **START**. The **START** pad is used only when you want to cook.) The display will "count down" and show "TIMER", indicating the timer function is in use.
4. **A signal will sound when the time has elapsed.**

**If the oven is cooking:**

1. **Do not stop the oven. Press numbers for the time desired.**

The numbers will replace the cooking time in the display, but the oven will continue to cook.

2. **Press TIMER.** The display will "count down" the timer time and show "TIMER". The oven will continue to cook undisturbed. **To check remaining cooking time before the timer stops, press RESET.** Press **TIMER** to see the timer again. When timer time has elapsed, a signal will sound, the display will show the remaining cooking time and the oven will finish cooking.
3. **To change a timer setting, simply press the new time desired and press TIMER again.** Do not stop the oven.

## TRY IT! DEFROSTING/ USING COOKMATIC® POWER LEVELS

Just as some foods cook better conventionally at lower rather than higher oven temperatures, some foods cook better at lower rather than higher microwave power levels. This oven has 10 power levels, including defrost, each well-suited for different types of foods. Most frozen foods can be defrosted quickly by using Cookmatic Level 3, while other foods may defrost better at other Cookmatic levels.

**NOTE:** Many foods, especially meats, must be defrosted completely before cooking begins. If ice crystals remain inside foods, cooking will be uneven, because the outside of food will be done, but the inside will be underdone. For best defrosting and cooking results at low power levels, carefully follow the appropriate instructions for the desired foods in the cookbook that came with this oven.

1. **Place foods in oven and close oven door.** If food is inside a plastic bag, slit the bag to allow steam to escape.
2. **Press RESET.**
3. **Press numbers for Cookmatic level** (to defrost at level 3, press **3**, which is 30% of Full Power). The number will appear in the display.

4. **Press COOKMATIC LEVEL.** The display will show the number you pressed and "COOK LEVEL".
5. **Press numbers for operating time.** The numbers will be displayed.
6. **Press START** and the oven will operate. The display will show "MICRO" and "POWER" and the power level selected. (For example, "3 COOK LEVEL" for Level 3). "MICRO" indicates the oven is programmed to cook. The magnetron tube cycles on and off to achieve the lower power level, so "POWER" flashes on and off accordingly.
7. **To change power levels during operation,** simply press the number for the new power level, then press **COOKMATIC LEVEL.** The display will change accordingly and the oven will operate at the new power level. You do not need to stop the oven. To change to Full Power, press **0**, then **COOKMATIC LEVEL.**
8. **The oven will stop and sound a signal at the end of cooking time.**

# MAINTENANCE — CLEANING THE OVEN

## To Clean the Oven and Door Interior

If inside walls, floor, door and splatter shield at the top of the oven should become splattered, simply wipe them with a paper towel or clean with a mild detergent in warm water using a soft sponge or cloth. If desired, a cup of water can be boiled in the oven to loosen soil before cleaning. After boiling the water, allow the water vapor to settle on the oven walls and soften the soil for several minutes before you open the door.

Do not use an abrasive cleanser to clean the inside. It might damage the finish. Never pour water into the bottom of the oven.

## To Clean the Splatter Shield Inside Oven

The splatter shield keeps the top of the oven and antenna from getting dirty. Normally, a damp cloth will remove any splatter from the shield. However, if you want to clean it more thoroughly, remove the splatter shield. Be careful not to bend the antenna when removing the splatter shield. The shield snaps into a lip in the front of the oven and three slots in the back wall. Place your thumbs in the two indentations in the front of the shield. Press lightly towards the back and carefully lower the shield away from the antenna. Pull the shield out of the back slots and out of the oven.

Wash the shield in hot soapy water. Do not wash in a dishwasher. Do not use harsh or abrasive cleansers. When replacing, again be careful not to bend the antenna. To replace, fit shield tabs into the

three slots at the top of the back. Lift front until shield snaps into place.

To check antenna operation, place a glass or cup of water in the unit, close the door and start the unit. A rotating shadow should be visible above the splatter shield.

**To Clean the Oven Exterior**, use a soft sponge or cloth dampened with mild, sudsy water. Do not use abrasive cleaners.

## To Clean the Discharge Air Vents

There will be a slight buildup of cooking vapors along the discharge louvers in the back of the oven on the right hand side. Clean the air vent with a damp cloth.

## Always Keep the Control Panel Clean

To clean the control panel, wipe with a damp cloth or sponge. If the time of day is accidentally erased from the control, press **RESET**, then set the correct time of day. If you wish to use the optional entry tone, unplug the oven, then follow Step A on page 6 before setting the clock.

# HOW TO CHANGE THE OVEN LIGHT



To remove bulb, turn it in the direction shown.

The lightbulb for the inside of the oven can be changed only from the back. On the upper left hand side of the oven back is a metal plate with one screw. The lightbulb is located behind this plate.

## ⚠ CAUTION: To Avoid The Risk of Electrical Shock:

Follow these steps to change the bulb:

- Unplug the oven from the electrical outlet.
- Facing the oven back, remove the screw and remove the plate.
- To remove the bulb, turn it counterclockwise, being careful not to burn fingers or break the bulb.
- Replace the bulb with a 40 watt, 115-125 volt appliance bulb, which may be purchased at grocery or hardware stores. To replace bulb, turn it clockwise.
- Reposition the plate, being careful not to bend the hinge tab. Tighten the screw. Do not operate the oven without having the plate in place.
- Connect the oven to power outlet.

# BEFORE YOU CALL FOR SERVICE

Be sure you have read and followed the operating instructions. Avoid unnecessary service calls. The electronic control module used in this microwave oven is the finest in versatility, quality and reliability. In many cases, a customer call for module timer service is caused by conditions other than failure of the controls. That's why you should read the following before calling for service.



**NOTE:** A Power Interruption Signal (dash lines) will appear in the display whenever the oven is initially plugged into an electrical outlet. The lines will also appear whenever electrical power to the oven has been interrupted and then restored. When you see these lines, simply set the clock.

## IF THE READOUT DISPLAY DOESN'T LIGHT UP, PLEASE CHECK:

- Is the oven plugged securely into the proper power outlet?
- Is a fuse blown or circuit breaker open?
- If the condition remains unchanged, perform the steps listed in the box on this page.

## IF THE READOUT APPEARS WRONG:

- Did you remember to press **RESET** before programming the oven?
- Have you (or someone else) pressed the controls after cooking has started?
- If the condition remains unchanged, perform the steps listed in the box on this page.

## IF ANOTHER FEATURE DOESN'T APPEAR TO BE OPERATING CORRECTLY:

- Have you followed the use and care instructions exactly? Review them to be sure.
- Did you press **RESET** before programming the oven?
- Is the oven plugged into a properly grounded and polarized outlet as described in the grounding instructions (page 4)? Improper installation can result in erratic operation.
- If the condition remains unchanged, perform the steps listed in box on this page.



# SERVICE CONTINUED

## IF MICROWAVE POWER WON'T COME ON:

- Did you press **START**
- Is the oven door securely closed?
- If the condition remains unchanged, perform the steps listed in box on this page.

If condition remains unchanged, please perform the following steps:

1. Check to see if a fuse or circuit breaker is open.
2. Unplug the oven.
3. Reconnect the oven to the wall outlet. Dash lines will appear in the display.
4. Press **RESET**. (Dash lines will disappear.)

**YOUR OVEN MUST ON A GROUNDED, POLARIZED CIRCUIT.**

## IF THE OVEN LIGHT PULSES DIMMER, THEN BRIGHTER:

- Is the line voltage to your home low or lower than usual? (The power company in your area should be able to tell you if there is low voltage to your home.)

## IF ROOM LIGHTS DIM OR PULSE DIMMER, THEN BRIGHTER WHEN THE OVEN IS IN USE:

- Is the microwave oven on a separate circuit? (Review grounding instructions on page 4.)

## IF FOOD IS OVERCOOKED:

- Did you remember to program the correct cooking power level? (Review instructions on page 7.)

## IF FOOD IS UNDERCOOKED:

- Are there other energy-consuming appliances on the same circuit as the microwave oven? (Review grounding instructions, page 4.)
- Is the line voltage to your home low or lower than usual? (The power company in your area should be able to tell you if there is low voltage to your home.)
- Did you remember to program the correct cooking power level? (Review instructions on page 7.)

## WHEN SERVICE IS REQUIRED:

Call nearest authorized service agency. (The dealer from whom you purchased your microwave oven can give you the name of your authorized Amana Service Center.) Help them give you prompt service by providing:

1. An accurate description of the trouble.
2. Complete model and serial numbers. (See page 2.)
3. Date of installation. (We also suggest you retain your sales receipt.)

Remember, repair by an unauthorized service person that results in subsequent failure will void the warranty promise. Amana has a large

network of Authorized Service Centers in the U.S. However, if you should have a service problem that is not resolved locally,

Write:

Customer Relations Department  
AMANA REFRIGERATION, INC.  
Amana, Iowa 52204

Or dial: (319) 622-5511 Monday through Friday (8 a.m. - 4:30 p.m., Central Time Zone) and ask for Customer Relations.

**Amana**  
**Asure**  
EXTENDED SERVICE PLAN

Amana is pleased to offer important opportunity for long-term service protection on your new Amana appliance. The Amana Asure Extended Service Plan is specially designed to supplement the strong warranty that already accompanies your appliance, and it combines with this standard warranty to provide budget-protecting coverage on your appliance for up to five full years, covering parts, labor and travel charges. Your participating Amana dealer has details.

CONSUMER INFORMATION LINE  
AMANA TOLL-FREE NUMBER  
 **1-800-843-0304**